processing said intensity values to derive a fragment population model of said one or more fragments; and

analyzing said fragment population model to determine a catalytic result.

2. (Once Amended) A method according to claim 1, wherein said distributing step comprises the step of:

distributing the test aliquot among a plurality of reaction wells within the separation medium, wherein said processing step comprises placing said intensity values into intensity profiles, each intensity profile representing one or more fragments from a corresponding reaction well.

8. (Once Amended) A method according to claim 1, further comprising the step of:

staining the test aliquot with a reporter molecule prior to said digitizing an image step.

9. (Once Amended) A method according to claim 8, wherein the test aliquot is not de-stained prior to said digitizing an image step.

10. (Once Amended) A method according to claim 1, wherein said enabling step comprises the step of:

performing electrophoretic separation to resolve at least one of DNA fragments and RNA fragments.

11. (Once Amended) A method according to claim 1, wherein said distributing step comprises the step of:

transferring a diluted enzyme concentration to one or more reaction chambers to digest a DNA substrate disposed in each reaction chamber, wherein said one or more macromolecular fragments result from the digestion of said DNA substrate.